**IT Applications Unit 3, AOS 1, Online Communities**

Complete the following, from Chapter 2, Problem-solving Methodology, pgs, 60-80

**Problem-solving Methodology: 4 Stages**

**Analyse**

**Design**

**Development**

**Evaluate**

**Case Study:**

**Indigenous Language Trust, (ILT)**

Using the case study, ILT complete the following:

**Analysis of the problem**

This stage involves the following three steps:

1. **Determining the solution requirements**
2. What needs to be established?

You need to establish what information needs to be provided, what data is needed and what functionality must be included in the website solution.

1. How is the problem best defined?

The problem is best defined by writing it first as a simple problem and then rewrite it as a question.

1. The aim of problem analysis is to ensure that the problem is clear enough to effectively analyse it and efficiently solve it. Define these two terms, efficiency and effectiveness.

Efficiency refers to the time cost and effort to produce the solution.

Effectiveness can be defines by the quality, relevancy, timeliness and clarity.

1. What type of organisation is the ILT?

The ILT is a non-profit organisation.

1. In your own words, define the problem for ILT.

ILT’s problem is that it isn’t very effective.

1. Identifying data and information needed for the solution, p 62;
   1. Need to identify where data is coming from for online community – inside or outside
   2. In the ILT case study what is the information needed for the solution?
2. Identifying the functions needed for the online community solution, p 63
   1. The functions needed for online communities can be separated into 2 distinct categories,
      * how the solution functions and

Function of a website determined by its ability to broadcast information, exchange information and store knowledge.

* + - attributes of the solution. List the characteristics of each of these.

Attributes of a website involve, ease of use, user friendliness, reliability, portability, robustness, ability to be maintained

1. What are the functions of the ILT website solution?
2. **Identify the constraints on the solution, p 64**
   1. List the technical and non-technical constraints.

Technical

Cost of the solution

Speed or time taken to access or exchange information

How secure the solution needs to be, closed or open

Number of people accessing online community at same time

Non-technical

Are there issues of privacy when exchanging information

Are there copyright issues to be considered

Are there cultural constraints, eg. ILT Case study rules relating to using images of deceased Aboriginals and use of their names on public documents.

* 1. What are the constraints on the ILT solution?

1. **Determine the scope of the solution, p 66**
   1. What needs to be considered in the scope of the solution?

Consider benefits of the solution on efficiency and effectiveness within organisation.

Scope clearly outlines what solution can and can’t do

Provides design stage with guidelines

* 1. In the ILT case study list the benefits or the scope of the solution in terms of
     1. Efficiency and

Time, reduced time to access & exchange information

Cost, reduced cost as workers in different offices can access information centrally

Effort, less effort as personnel in each office can build on information they already have rather than having to rediscover it

* + 1. Effectiveness

Improved quality of decision making due to collaborative nature of information exchange

Relevancy & timeliness, information broadcasted to the public is this

Completeness, information compiled using collaborative tools by online community will be more complete